GOVERNMENT OF INDIA
EARTH SCIENCES
LOK SABHA

UNSTARRED QUESTION NO:2923
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Monsoon Forecasts
Gaikwad Dr. Sunil Baliram;Gavit Dr. Heena Vijaykumar;Gopal Dr. K.;Jayavardhan Dr. Jayakumar;Kirtikar Shri Gajanan Chandrakant;Patil Shri Vijaysinh Mohite;Satav Shri Rajeev Shankarrao;Singh Shri Kunwar Haribansh;Sule Smt. Supriya Sadanand

Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether the monsoon forecast by the India Meteorological Department (IMD) was accurate during each of the last three years and if not, the reasons therefor;

(b) whether IMD has not announced the exact timing of arrival of monsoon this year and if so, the details thereof and the reasons therefor;

(c) whether a research institute in Germany has claimed a novel method to forecast the monsoon correctly and if so, the details thereof;

(d) whether the Government is in touch with the institute or proposes to make use of this technology and if so, the details thereof and if not, the reasons therefor; and

(e) whether IMD is likely to come up with second stage prediction of current monsoon in the month of June and if so, the details thereof?

Answer

MINISTER OF STATE FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTRY OF EARTH SCIENCES
(SHRI Y. S. CHOWDARY)

(a) The monsoon forecast during last three years was as under;

Year Forecast Actual (% of LPA)

Issued in April Issued in June
2013 98 % of LPA Â± 5 98 % of LPA Â± 4 106
2014 95 % of LPA Â± 5 93 % of LPA Â± 4 88
2015 93% of LPA with a model error of Â± 5% 88% of LPA Â±4% 86

The forecast for monsoon during 2014 & 2015 were correct. However during 2013, the monsoon forecast issued by India Meteorological Department (IMD) was marginally under estimated. It may be mentioned here that both 2014 & 2015 were deficient monsoon years.

(b) Climatologically monsoon is expected to reach South Kerala by 31st May. The forecast for the 2016 monsoon onset date will be issued on 15th May, 2016.

Monsoon onset over Kerala follows the monsoon advancement over the Andaman Sea that climatologically falls around 20th May. So as to account for the Monsoon advancement over Andaman Sea, the monsoon onset forecast over Kerala is issued around middle of May annually.

(c-d) Although Potsdam Institute for Climate Impact Research, Germany has claimed a noval method to forecast monsoon onset over the Eastern Ghats (North Coastal Andhra Pradesh and adjoining Southern Odisha) and monsoon withdrawal from North Pakistan only, the methodology adopted has some limitations and uncertainty. At the same time, the respective withdrawal predictions have shown reduced skill during recent 2010-2014 period. As the methodology has not been tested for monsoon onset over the South Kerala, no tangible gain is expected for our operational onset monsoon forecast.

However, IMD issues the monsoon onset forecast based on an indigenously developed model. The forecasts for monsoon onset for last 10 years have been found correct.

(e) IMD will issue the updated forecast by the first week of June 2016 based on the operational model and with the updated data upto May 2016.